

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.15**SOURCE INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** SIR-002393**Date Inspected:** 11-Nov-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**Location:** Changxing Dao, Shanghai**Quality Control Contact:** William (Bill) Oak**Quality Control Present:** Yes No**Material transfer:** Yes No N/A**Sampled Items:** Yes No N/A**Stock Transfer:** Yes No N/A**OK to Cut:** Yes No N/A**Rebar Test Witness:** Yes No N/A**Delayed/Cancelled:** Yes No N/A**Other:** Coatings Inspection**Bridge No:** 34-0006**Component:** OBG 7BE, Cross Beam Bottom Plate, East Tower**Bid Item:** 77, 78, 79**Lot No:** B265**Summary of Items Observed:**

On this date Caltrans Office of Structural Materials (OSM) Quality Assurance (QA) NACE III coating inspector, Mr. James Lumley arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island in Shanghai, China. The purpose of the coating inspections are to monitor the surface preparation and coating applications for the SAS Bay Bridge project. This QA NACE III coating inspector observed the following:

OBG 7BE

Internal Base Metal surfaces were abrasive blasted initially for VT inspection and identification of fabrication defects and grinding operations. Caltrans QA Tim McClendon performed VT inspection and mapped accordingly. Panel Point #50 Upper Sections and both Side Plates and Bottom Plate surfaces were all abrasive blasted for inspection to an SSPC SP-10 condition and Interzinc 22 applied after 3 blast inspections were performed. Profile amplitude was 60-84um and Chloride values were 20us/cm.

OBG 6AW

Cross Beam Bottom Plate Base metal surfaces were de-greased in accordance with SSPC SP-1 in preparation of abrasive blasting operations. Chloride values were 10us/cm.

East Tower Lift #1

Internal surfaces of Skins A-E from 0-9 M were scheduled to be washed in accordance with SSPC SP-1 and abruptly cancelled due to welding operations in the work area.

Sub-Assemblies

Base Metal surfaces of 56 pieces of X37L Splice Plates were washed and de-greased in accordance with SSPC SP-1 in preparation of abrasive blasting.

OBG 6CW

External undercoated surfaces were tested for cure in accordance with the contract documents. Pencil Hardness

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and MEK rub was performed. All tests results were within the parameters of the contract documents relative to cure and Interfine 979 “mist” coat was applied to undercoated surfaces after masking of faying surfaces was performed.

OBG 6AE

Cross Beam Bottom Plate beneath the FL-3 Beams was tested for cure of undercoat with Pencil hardness and MEK Rub. Testing results permitted the application of Interfine 979 “mist” coating after masking of the adjacent faying surfaces.

Yard Walk

Performed yard walk with ABF Bill Oak to ascertain and determine extent of coating damages to the external surfaces of Lifts 3 & 4 east and West and develop a strategy for repairs and mitigation of repairs to minimize rust staining and performing appropriate touch up and repair protocols to ensure uniformity of appearance.

Sub-Assemblies

Base Metal surfaces of 37 Pieces of X37L Splice Plates were abrasive blasted to an SSPC SP-10 condition and Interzinc 22 applied.

OBG 7AW

Performed a pre-blast survey of external surfaces with Caltrans QA Tim McClendon to ascertain timeline until segment arrive in blast shop. Viewed Rust Grade “D” on external and internal surfaces.

Note: All inspections were performed jointly with ABF & ZPMC QA/QC representatives and Caltrans QA Lumley when achievable. International Protective Coatings technical service representative were available for inspections and consultation.

Summary of Conversations:

Caltrans QA Lumley inquired with ABF QA Bill Oak as to why no Notice of Inspections were sent by ZPMC for any work/repairs associated with Lift 4 East since loaded upon the ship.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang (858) 699-9549, who represents the Office of Structural Materials for your project.

Inspected By:	Lumley,James	Quality Assurance Inspector
Reviewed By:	Peterson,Art	QA Reviewer
